

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

February 5, 2021

Eric Scheyer Chief Executive Officer Star Peak Energy Transition Corp. 1603 Orrington Avenue, 13th Floor Evanston, Illinois 60201

Re: Star Peak Energy Transition Corp.

Amendment No. 1 to Registration Statement on Form S-4
Filed January 22, 2021
File No. 333-251397

Dear Mr. Scheyer:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our January 13, 2021 letter.

Amendment No. 1 to Registration Statement on Form S-4

<u>Unaudited Historical Comparative and Pro Forma Combined Per Share Information of STPK and Stem, page 19</u>

1. We note your response to prior comment 5. Please explain to us how you determined the exchange ratio you used to calculate the equivalent pro forma per share data.

Intellectual Property, page 108

2. We note your response to prior comment 10. Please revise to clarify the nature of the claims covered by the intellectual property you hold.

Eric Scheyer Star Peak Energy Transition Corp. February 5, 2021 Page 2

Stem's Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates, page 139

3. We note your response to prior comment 15. Please revise your disclosures to more clearly address how the fair value estimates of your common stock relate to the fair value implied by the current merger transaction.

Material U.S. Federal Income Tax Consequences, page 208

4. We note your response to prior comment 21. If you represent that this transaction will result in no tax consequences to investors, it appears you are required to file the exhibit specified by Item 601(b)(8) of Regulation S-K. See Section III.A.2 of Staff Legal Bulletin No. 19. Please revise and file the required exhibit.

Financial Statements

General, page F-1

5. Please note the updating requirements of Rule 8-08 of Regulation S-X, as applicable.

Consolidated Financial Statements - Stem, Inc.

2. Summary of Significant Accounting Policies

Equity Method Investments, page F-43

6. We note your response to prior comment 23. Given that your SPE's are VIEs and are evaluated for consolidation under the VIE model, please provide a more comprehensive analysis regarding how you determined you are not the primary beneficiary. Please refer to ASC 810-10-25-38A through 25-38J in your analysis.

Variable Interest Entities, page F-43

7. We note your response to prior comment 24. Please provide the disclosures required by ASC 810-10-50-4 and ASC 810-10-50-5A with sufficient context related to the fact that some of the assets and liabilities are included in your consolidated financial statements, or more fully explain to us why you believe the disclosures may be misleading.

Financing Obligations, page F-47

8. We note your response to prior comment 23. Please quantify the amounts of energy storage systems associated with the financing obligations as of each balance sheet date. Please also quantify the amounts of revenue and incentive fees associated with the financing obligations during each period presented.

Eric Scheyer Star Peak Energy Transition Corp. February 5, 2021 Page 3

3. Revenue, page F-53

- 9. We note your responses to prior comments 25 and 27, including the revised disclosures you provided. Please further address the following:
 - In regard to host customer arrangements and partnership arrangements, more fully explain the specific nature of the services you provide under each arrangement. To the extent the services you provide are similar, explain if and how you considered that in your assessment under ASC 842 and explain why the amounts related to partnership service revenue in the annual and interim disaggregated revenue disclosures are so minimal; and
 - In regard to your disclosures under Host Customer Arrangements, more fully explain your disclosure regarding arrangements in which the contractual term is shorter than the estimated benefit period. Clarify what the estimated benefit period is and how it is determined. In addition, in regard to your determination as to whether or not upfront incentive payments represent a material right, more fully explain how that determination impacts the subsequent accounting for such payments.

14. Subsequent Events, page F-98

10. Please disclose the terms and estimated fair value of the options granted in December 2020, including the material assumptions underlying the fair value estimate.

You may contact Ernest Greene, Staff Accountant at (202) 551-3733 or Anne McConnell, Staff Accountant at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact Geoffrey Kruczek, Staff Attorney at (202) 551-3641 or Sherry Haywood, Staff Attorney at (202) 551-3345 with any other questions.

Sincerely,

Division of Corporation Finance Office of Manufacturing

cc: Matthew R. Pacey